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Education:

- 1996, Dec. 17 Ph.D. in Physics, University of California, Berkeley
Thesis Advisors: Richard Muller & Saul Perlmutter
Thesis Title: *The Discovery of High-Redshift Supernovae and Their Cosmological Implications.*
- 1994 M.A. in Physics, University of California, Berkeley
- 1991 B.S. (*Magna Cum Laude*) in Physics (*High Honors*),
University of Michigan, Ann Arbor

Professional Experience:

- 2003- Staff Scientist, Physics Division, Lawrence Berkeley National Laboratory
- 2002-2003 Term Scientist, Physics Division, Lawrence Berkeley National Laboratory
- 2000-2002 Research Assistant, Center for Particle Astrophysics and Lawrence Berkeley National Laboratory
- 1997- 1999 Research Associate, Laboratoire de Physique Corpusculaire et Cosmologie, Collège de France
- 1992-1997 Research Assistant, Center for Particle Astrophysics and Lawrence Berkeley Laboratory
- 1989-1991 Research Assistant, Physics Department, University of Michigan

Teaching Experience:

- 1991-1992 University of California, Berkeley. Teaching assistant

Professional Memberships:

American Astronomical Society

Honors and Awards:

- 2007 Cosmology Prize, Gruber Foundation

REFERENCES

- G. Garavini et al. Quantitative comparison between type Ia supernova spectra at low and high redshifts: a case study. *A&A*, 470:411–424, August 2007.
- G. Aldering, A. G. Kim, M. Kowalski, E. V. Linder, and S. Perlmutter. Snapping supernovae at $z > 1.7$. *Astroparticle Physics*, 27:213–225, March 2007.
- J. B. James, T. M. Davis, B. P. Schmidt, and A. G. Kim. Spectral diversity of Type Ia supernovae. *MNRAS*, 370:933–940, August 2006.
- A. Conley et al. Measurement of Ω_m , Ω_Λ from a Blind Analysis of Type Ia Supernovae with CMAGIC: Using Color Information to Verify the Acceleration of the Universe. *ApJ*, 644:1–20, June 2006.
- T. M. Davis, B. P. Schmidt, and A. G. Kim. Ideal Bandpasses for Type Ia Supernova Cosmology. *PASP*, 118:205–217, February 2006.
- A. G. Kim and R. Miquel. Optimal extraction of cosmological information from supernova data in the presence of calibration uncertainties. *Astroparticle Physics*, 24:451–458, January 2006.
- I. M. Hook et al. Spectra of High-Redshift Type Ia Supernovae and a Comparison with Their Low-Redshift Counterparts. *AJ*, 130:2788–2803, December 2005.
- G. Garavini et al. Spectroscopic Observations and Analysis of the Unusual Type Ia SN 1999ac. *AJ*, 130:2278–2292, November 2005.
- S. Nobili et al. Restframe I-band Hubble diagram for type Ia supernovae up to redshift $z = 0.5$. *A&A*, 437:789–804, July 2005.
- C. Lidman et al. Spectroscopic confirmation of high-redshift supernovae with the ESO VLT. *A&A*, 430:843–851, February 2005.
- D. Huterer, A. Kim, L. M. Krauss, and T. Broderick. Redshift Accuracy Requirements for Future Supernova and Number Count Surveys. *ApJ*, 615:595–602, November 2004.
- G. Blanc et al. Type Ia supernova rate at a redshift of 0.1. *A&A*, 423:881–894, September 2004.
- G. Garavini et al. Spectroscopic Observations and Analysis of the Peculiar SN 1999aa. *AJ*, 128:387–404, July 2004.
- R. Ansari et al. Variable stars towards the bulge of M 31: The AGAPE catalogue. *A&A*, 421:509–518, July 2004.
- A. G. Kim, E. V. Linder, R. Miquel, and N. Mostek. Effects of systematic uncertainties on the supernova determination of cosmological parameters. *MNRAS*, 347:909–920, January 2004.

- J. Rhodes et al. Weak lensing from space I: instrumentation and survey strategy. *Astroparticle Physics*, 20:377–389, January 2004.
- R. A. Knop et al. New Constraints on Ω_M , Ω_Λ , and w from an Independent Set of 11 High-Redshift Supernovae Observed with the Hubble Space Telescope. *ApJ*, 598:102–137, November 2003.
- C. Afonso et al. Bulge microlensing optical depth from EROS 2 observations. *A&A*, 404:145–156, June 2003.
- M. Sullivan et al. The Hubble diagram of type Ia supernovae as a function of host galaxy morphology. *MNRAS*, 340:1057–1075, April 2003.
- R. Pain et al. The Distant Type Ia Supernova Rate. *ApJ*, 577:120–132, September 2002.
- P. Nugent, A. Kim, and S. Perlmutter. K-Corrections and Extinction Corrections for Type Ia Supernovae. *PASP*, 114:803–819, August 2002.
- B. Goldman et al. EROS 2 proper motion survey: Constraints on the halo white dwarfs. *A&A*, 389:L69–L73, July 2002.
- F. Derue et al. Observation of periodic variable stars towards the Galactic spiral arms by EROS II. *A&A*, 389:149–161, July 2002.
- C. Afonso et al. Photometric constraints on microlens spectroscopy of EROS-BLG-2000-5. *A&A*, 378:1014–1023, November 2001.
- G. Goldhaber, D. E. Groom, A. Kim, et al. Timescale Stretch Parameterization of Type Ia Supernova B-Band Light Curves. *ApJ*, 558:359–368, September 2001.
- F. Derue et al. Observation of microlensing toward the galactic spiral arms. EROS II 3 year survey. *A&A*, 373:126–138, July 2001.
- D. Hardin et al. Type Ia supernova rate at $z \sim 0.1$. *A&A*, 362:419–425, October 2000.
- C. Afonso et al. Combined Analysis of the Binary Lens Caustic-crossing Event MACHO 98-SMC-1. *ApJ*, 532:340–352, March 2000.
- B. Revenu, A. Kim, R. Ansari, F. Couchot, J. Delabrouille, and J. Kaplan. Destriping of polarized data in a CMB mission with a circular scanning strategy. *A&AS*, 142:499–509, March 2000.
- T. Lasserre et al. Not enough stellar mass Machos in the Galactic halo. *A&A*, 355:L39–L42, March 2000.
- A. Goobar et al. The Acceleration of the Universe: Measurements of Cosmological Parameters from Type Ia Supernovae. *Physica Scripta Volume T*, 85:47–+, 2000.

- B. Goldman et al. EROS 2 proper motion survey: a field brown dwarf, and an L dwarf companion to LHS 102. *A&A*, 351:L5–L9, November 1999.
- F. Derue et al. Observation of microlensing towards the galactic spiral arms. EROS II. 2 year survey. *A&A*, 351:87–96, November 1999.
- F. Bauer et al. A slope variation in the period-luminosity relation for short period SMC Cepheids. *A&A*, 348:175–183, August 1999.
- S. Perlmutter et al. Measurements of Ω and Λ from 42 High-Redshift Supernovae. *ApJ*, 517:565–586, June 1999.
- C. Afonso et al. Microlensing towards the Small Magellanic Cloud EROS 2 two-year analysis. *A&A*, 344:L63–L66, April 1999.
- R. Ansari et al. AgapeZ1: a large amplification microlensing event or an odd variable star towards the inner bulge of M31. *A&A*, 344:L49–L52, April 1999.
- C. Afonso et al. EROS 2 intensive observation of the caustic crossing of microlensing event MACHO SMC-98-1. *A&A*, 337:L17–L20, September 1998.
- S. Perlmutter et al. Discovery of a supernova explosion at half the age of the universe. *Nature*, 391:51–+, January 1998.
- S. Perlmutter et al. Measurements of the Cosmological Parameters Ω and Λ from the First Seven Supernovae at $z \geq 0.35$. *ApJ*, 483:565–+, July 1997.
- A. G. Kim et al. Implications for the Hubble Constant from the First Seven Supernovae at $z \geq 0.35$. *ApJ*, 476:L63+, February 1997.
- R. Pain et al. The Type Ia Supernova Rate at z approximately 0.4. *ApJ*, 473:356–+, December 1996.
- A. Kim, A. Goobar, and S. Perlmutter. A Generalized K Correction for Type IA Supernovae: Comparing R-band Photometry beyond $z = 0.2$ with B, V, and R-band Nearby Photometry. *PASP*, 108:190–+, February 1996.
- S. Perlmutter et al. A supernova at $z = 0.458$ and implications for measuring the cosmological deceleration. *ApJ*, 440:L41–L44, February 1995.